

## CLAIMS

What is claimed is:

1. A medical monitoring system comprising:  
a sensor unit configured to sense one or more physiological characteristics of a patient;  
a monitoring unit in communication with the sensor unit and operable to communicate information relating to the sensed physiological characteristics to a central unit; and  
a plurality of communications channels operable to communicate between the monitoring unit and the central unit, the monitoring unit operable to specify for transmission a data set that is tailored to a particular communications channel to be used to communicate the information relating to the sensed physiological characteristics to the central unit.
2. The system of claim 1 wherein the tailored data set for transmission comprises a subset of a full data set.
3. The system of claim 1 wherein the tailored data set for transmission comprises information derived from a data set.
4. The system of claim 1 wherein the monitoring unit is further operable to select a communications channel from among the plurality of communications channel.
5. The system of claim 4 wherein the monitoring unit selects the communication channel based on one or more predetermined criteria.
6. The system of claim 5 wherein the predetermined criteria include one or more of the communications channels' relative availability, bandwidth, quality, latency, cost and reliability.
7. The system of claim 4 wherein the tailored data set comprises a data set that is adapted according to one or more parameters of the selected communications channel.

8. The system of claim 1 wherein the plurality of communications channels include one or both of wired and wireless communications channels.

9. The system of claim 1 wherein the plurality of communications channels include one or more of a land-line telephone network, a cellular telephone network, a paging network and a packet-switched data network.

10. A method of controlling a portable medical monitoring unit, the method comprising:  
receiving sensor data from a sensor, the received sensor data representative of one or more physiological characteristics of a patient being monitored;  
selecting a communications channel from among a plurality of potential communications channels;  
specifying a data set for transmission to a central unit, the specified data set being adapted to the selected communications channel; and  
transmitting the specified data set over the selected communications channel to the central unit.

11. The method of claim 10 wherein selecting the communications channel from among the plurality of potential communications channels is based on one or more predetermined criteria.

12. The method of claim 11 wherein the predetermined criteria include one or more of the communications channels' relative availability, bandwidth, quality, latency, cost and reliability.

13. The method of claim 10 wherein specifying the data set for transmission to the central unit comprises adapting the data set according to one or more parameters of the selected communications channel.

14. The method of claim 10 wherein the specified data set for transmission comprises a subset of a full data set.

15. The method of claim 10 wherein the specified data set for transmission comprises information derived from a data set.

16. The method of claim 10 wherein the plurality of communications channels include one or both of wired and wireless communications channels.

17. The method of claim 10 wherein the plurality of communications channels include one or more of a land-line telephone network, a cellular telephone network, a paging network and a packet-switched data network.